

What is claimed is:

1. The method of manufacturing a speed ring, steps  
comprising:
  - 5 feeding an un-magnetized magnetic strip from a coil into a  
magnetizing fixture;  
stretching the magnetic strip to a predetermined length;  
magnetizing the magnetic strip by sending an electric charge  
through the strip;
  - 10 cutting the magnetized strip and retracting the coil;  
advancing the magnetized strip to a trimming fixture having  
a Hall Effect sensor;  
detecting the center of a pair of poles with the Hall Effect  
sensor;
  - 15 cutting the end of the magnetic strip;  
detecting the number of pairs of poles in the magnetic  
strip;  
cutting the magnetized strip at the center of a pair of  
poles, based on the number of pairs of poles to create  
20 a second end; and  
butting the first and second ends together.
2. The method of manufacturing the speed ring of claim 1  
steps further comprising recording the length of the  
25 stretched magnetic strip and assigning a part number to the  
magnetic strip according to the stretched length.
3. The method of manufacturing the speed ring of claim 1  
wherein the predetermined length is determined by a  
30 microprocessor.

4. The method of manufacturing the speed ring of claim 1 wherein the magnetized strip is installed into a slot on a trolley that within the magnetized fixture.
- 5 5. The method of manufacturing the speed ring of claim 4 wherein the trolley is computer controlled.
6. The method of manufacturing the speed ring of claim 5 wherein the computer controlled trolley moves laterally to  
10 pull the magnetic strip away from the coil, removing slack from the magnetic strip.
7. The method of manufacturing a speed ring described in claim 4 wherein the trolley is controlled by a computer that  
15 determines and records the length of the stretched magnetic strip.
8. The method of manufacturing the speed ring of claim 1 wherein the magnetized strip is advance over the  
20 Hall Effect sensor by a microprocessor-controlled servomotor.
9. The method of manufacturing the speed ring of claim 1 further comprising the step of installing the magnetic strip  
25 in the inside of a ring with a fixed inside diameter, with the ends butted together.
10. The method of manufacturing the speed ring of claim 8 wherein the ring is a wheel.
- 30 11. The method of manufacturing a speed ring, steps comprising:

feeding an un-magnetized magnetic strip from a coil into the  
 slot of a trolley of a magnetizing fixture;  
 clamping the magnetic strip into place;  
 stretching the magnetic strip to a predetermined length to  
 5        create spacing between magnetic poles;  
 magnetizing the magnetic strip by sending an electric charge  
       through the strip;  
 cutting the magnetized strip and retracting the coil;  
 advancing the magnetized strip to a trimming fixture having  
 10        a Hall Effect sensor;  
 detecting the center of a pair of poles with the Hall Effect  
       sensor;  
 cutting the end of the magnetic strip;  
 detecting the number of pairs of poles to determine the  
 15        location of the final cut;  
 cutting the magnetized strip at the center of a pair of  
       poles to create a second end; and  
 butting the first and second ends together.

20    12. The method of manufacturing a magnetic strip for a  
       speed ring, steps comprising:  
 advancing the magnetized strip to a trimming fixture having  
       a microprocessor operably connected to a Hall Effect  
       sensor;  
 25    detecting the center of a pair of poles with the Hall Effect  
       sensor;  
 cutting the end of the magnetic strip;  
 detecting the number of pairs of poles in the magnetic strip  
       with the microprocessor; and  
 30    cutting the magnetized strip at the center of a pair of  
       poles, making the cut based on the number of pairs of  
       poles detected by the microprocessor.